52. (Amended) A method for recovering an antagonist or an agonist of an isolated peptide according to any of claims 38, 39, 41, or 42, said antagonist or said agonist being capable of specifically binding to an opioid receptor-like 1 (ORL_1) receptor present on a surface of cells to prevent said isolated peptide from activating said receptor, said method comprising the steps of:

contacting a cell comprising a vector adapted for expression in said cell, with a compound and said isolated peptide under conditions permitting measuring a functional response, said vector comprising a polynucleotide which expresses said receptor on the cell's surface;

determining whether the compound prevents said isolated peptide from activating said receptor; and

recovering the compound as the antagonist or the agonist if said compound does not activate said receptor.

59. (New) A host cell comprising the vector of claim 47.

REMARKS

Upon entry of this amendment claims 35, 37-42, 47, 51, 52, and 59 are pending. Claims 36, 48-50, 57 and 58 are canceled without prejudice to pursuing these in a continuing or related application. The claim amendments do not introduce new matter and a marked-up version of the claims showing where changes have been made is attached. Applicants thank Examiner Murphy for the interview of October 3, 2001 and his suggestions regarding claim language that would put the Application in condition for allowance. Applicants thank the Examiner for agreeing to rejoin previously withdrawn claims 51 and 52 and to consider amendments to these claims.

CONCLUSION

Applicants submits that all claims are allowable as written and respectfully request allowance of the Application by the Examiner. If the Examiner believes that a telephone conversation with Applicants' attorney or agent would expedite prosecution of this application,

the Examiner is cordially invited to call the attorney of record at 617-573-0451, or Applicants' agent, Dianne Rees, at 617-573-0667.

Respectfully submitted,

Date: October 9, 2001

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Marked-Up Version of Claims Showing Changes Being Made

35. (Amended) An isolated polynucleotide comprising a nucleic acid sequence listed as [which corresponds to at least 70% of the] SEQ ID NO:1 or [its complimentary] a complementary strand thereof [wherein said polynucleotide encodes a ligand of the opioid receptor-like 1 (ORL_1) receptor].

37. (Amended) An isolated polynucleotide comprising [at least the SEQ ID NO:1, its complementary strand] more than 15 contiguous nucleotides of a sequence listed as [or able to identify or reconstitute] SEQ ID NO:1 or [its complimentary] a complementary strand thereof.

38. (Amended) An isolated peptide encoded by an isolated polynucleotide [which is at least 70% identical to] comprising a sequence listed as SEQ ID NO: 1 or [its complimentary] a complementary strand thereof [wherein said polynucleotide encodes a ligand of the opioid receptor-like 1 (ORL_1) receptor].

39. (Amended) An isolated peptide [according to Claim 38,] comprising the peptide listed as SEQ ID NO:2 [or agonists of a receptor or receptors of said peptide].

40. (Amended) An isolated polynucleotide comprising a nucleic acid encoding a peptide selected from the group consisting of SEQ ID. NO: 2, SEQ ID NO:3, and SEQ ID NO:4 [An isolated peptide according to Claim 39, which is a ligand of the ORL_1 receptor].

41. (Amended) An isolated peptide [according to Claim 38,] comprising the peptide listed as SEQ ID NO:3 [or agonists of a receptor or receptors of said peptide].

42. An isolated peptide [according to Claim 38,] comprising the peptide listed as SEQ ID NO:4 [or agonists of a receptor or receptors of said peptide].

47. A vector comprising an isolated polynucleotide according to [Claim] claim 35 or 40.

51. A method for recovering an antagonist or an agonist of an isolated peptide according to any of claims [the Claim] 38, 39, 41, or 42, said antagonist or said agonist being capable of specifically binding to an opioid receptor-like 1 (ORL_1) receptor present on a cell surface, said method comprising the steps of:

> preparing a cell extract from cells comprising a vector adapted for expression in said cells, said vector comprising a polynucleotide which expresses said receptor on the cells' surface;

isolating a membrane fraction from said cell extract;

incubating compounds present within said membrane fraction with said peptide under conditions permitting [a] said peptide [known] to bind specifically to said receptor;

detecting the presence of compounds, [ii] if any, bound to said receptor; and recovering said bound compounds as the antagonist or the agonist.

52. A method for recovering an antagonist or an agonist of an isolated peptide according to any of claims [Claim] 38, 39, 41, or 42, said antagonist or said agonist being capable of specifically binding to an opioid receptor-like 1 (ORL_1) receptor present on a surface of cells to prevent said isolated peptide from activating said receptor, said method comprising the steps of:

contacting a cell comprising a vector adapted for expression in said cell, with a compound and said isolated peptide under conditions permitting measuring a functional response, said vector comprising a polynucleotide which expresses said receptor on the cell's surface;

determining whether the compound prevents said isolated peptide [to] from activating [activate] said receptor; and

recovering the compound as the antagonist or the agonist if said compound does not activate said receptor.